

IN THE CLAIMS:

The following listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) A method for forming and verifying a service message for a multi-service environment, said method comprising:

digitally signing one or more message components for a first part of a service message;

digitally signing one or more message components for a second part of said service message; and

forming said service message from said first and second parts, and first and second digital signatures of said first and second parts;

receiving said service message at a server;

partitioning said service message at said server into a first partition and a second partition, wherein said first partition comprises said first part of said service message and said first digital signature, and wherein said second partition comprises said second part of said service message and said second digital signature;

sending said first partition from said server to a first service in said multi-service environment;

verifying said first part of said service message at said first service using said first digital signature;

sending said second partition from said server to a second service in said multi-service environment; and

verifying said second part of said service message at said second service using said second digital signature.

2. (original) A method according to claim 1, wherein at least one message component is common to both said first and second parts of said service message.

3. (original) A method according to claim 1, further comprising associating one or more message components relating to a first service with each other to form said first part, and associating said one or more message components relating to a second service with each other to form said second part.
4. (original) A method according to claim 1, wherein said service message includes one or more message blocks, each comprising one or more message components.
5. (original) A method according to claim 4, wherein at least one message block is common to both said first and second parts of said service message.
6. (currently amended) A method according to claim 5, wherein two or more blocks comprising one of said first ~~or~~ and second parts of said message are related to each other.
7. (original) A method according to claim 1, further comprising forming said service message such that cryptographic data for said service message is disposed in a separate part of said message from said first and second parts.
8. (currently amended) A method for decoding a service message comprising first and second parts respectively associated with first and second services of a multi-service environment, said method comprising:
partitioning said service message into a first partition and a second partition, wherein said first partition comprises said first part of said service message, and wherein said second partition comprises said second part of said service message;
receiving said first partition of said service message at a first service;
verifying only said first part of said message at said first service;
receiving said second partition of said service message at a second service; and
verifying only said second part of said service message at said second service.

9. (currently amended) A program element comprising program code for configuring a computer system to ~~form~~ decode a service message for a multi-service environment, the program code operable to:

digitally sign one or more message components for a first part of a service message;

digitally sign one or more message components for a second part of said service message; and

form said service message from said first and second parts, and first and second digital signatures of said first and second parts;

receive said service message at a server;

partition said service message at said server into a first partition and a second partition, wherein said first partition comprises said first part of said service message and said first digital signature, and wherein said second partition comprises said second part of said service message and said second digital signature;

send said first partition from said server to a first service in said multi-service environment;

verify said first part of said service message at said first service using said first digital signature;

send said second partition from said server to a second service in said multi-service environment; and

verify said second part of said service message at said second service using said second digital signature.

10. (currently amended) A program element comprising program code translatable to configure a computer system to ~~form~~ decode a service message for a multi-service environment, the program code operable to:

partition said service message into a first partition and a second partition, wherein said first partition comprises said first part of said service message, and wherein said second partition comprises said second part of said service message;

receive said first partition of said service message at a first service;

verify only said first part of said message at said first service;

receive said second partition of said service message at a second service; and
verify only said second part of said service message at said second service.

11. (currently amended) A program element comprising program code for configuring a computer system to decode a service message comprising first and second parts respectively associated with first and second services of a multi-service environment, the program code operable to:

partition said service message into a first partition and a second partition, wherein said first partition comprises said first part of said service message, and wherein said second partition comprises said second part of said service message;

verify only said first part of said message for said first service; and
verify only said second part of said message for said second service.

12. (currently amended) A program element comprising program code translatable to configure a computer system to decode a service message comprising first and second parts respectively associated with first and second services of a multi-service environment, the program code operable to:

verify only said first part of said message for said first service; and
verify only said second part of said message for said second service;
wherein at least one message component is common to both said first and second parts of said service message.

13. (currently amended) A computer-readable medium encoded with computer-readable program code for configuring a computer system to form decode a service message for a multi-service environment, the program code operable to:

digitally sign one or more message components for a first part of a service message;

digitally sign one or more message components for a second part of said service message; and

form said service message from said first and second parts, and first and second digital signatures of said first and second parts;

receive said service message at a server;

partition said service message at said server into a first partition and a second partition, wherein said first partition comprises said first part of said service message and said first digital signature, and wherein said second partition comprises said second part of said service message and said second digital signature;

send said first partition from said server to a first service in said multi-service environment;

verify said first part of said service message at said first service using said first digital signature;

send said second partition from said server to a second service in said multi-service environment; and

verify said second part of said service message at said second service using said second digital signature.

14. (currently amended) A computer-readable medium encoded with computer-readable program code translatable for configuring a computer system to form a service message for a multi-service environment, the program code operable to:

digitally sign one or more message components for a first part of a service message;

digitally sign one or more message components for a second part of said service message; and

form said service message from said first and second parts, and first and second digital signatures of said first and second parts;

wherein at least one message component is common to both said first and second parts of said service message.

15. (currently amended) A computer-readable medium encoded with computer-readable program code for configuring a computer system to decode a service message comprising first and second parts respectively associated with first and second services of a multi-service environment, the program code operable to:

partition said service message into a first partition and a second partition, wherein said first partition comprises said first part of said service message, and wherein said second partition comprises said second part of said service message;

verify only said first part of said message for said first service; and

verify only said second part of said message for said second service.

16. (currently amended) A computer-readable medium encoded with computer-readable program code translatable for configuring a computer system to decode a service message comprising first and second parts respectively associated with first and second services of a multi-service environment, the program code operable to:

verify only said first part of said message for said first service; and

verify only said second part of said message for said second service;

wherein at least one message component is common to both said first and second parts of said service message.

17. (currently amended) An electronic signal encoding a service message for a multi-service environment, wherein first and second parts of said message are each separately digitally signed, and wherein said message is partitioned into a first partition comprising the first part and a second partition comprising the second part prior to decoding said message.

18. (original) An electronic signal according to claim 17, wherein cryptographic data for said message is a third, separate part of said message.

19. (original) An electronic signal according to claim 17, wherein said first part of said message is associated with a first service, and said second part of said message is associated with a second service.

20. (original) An electronic signal according to claim 17, comprising a plurality of message components forming said message, said first and second parts each comprising one or more of said components.

21. (original) An electronic signal according to claim 17, wherein at least one message component is common to both first and second parts of said service message.

22. (original) An electronic signal according to claim 20, comprising a plurality of message blocks each including one or more of said message components, said first and second parts each comprising one or more of said message blocks.

23. (currently amended) An electronic signal according to claim 22, wherein two or more blocks comprising said first ~~or~~ and second parts of said message are related to each other.

24. (currently amended) A computer system for a multi-service environment, the computer system configured to:

receive two or more message components for a service message;

digitally sign one or more of said message components for a first part of said service message;

digitally sign one or more of said message for a second part of said service message; and

form said service message from said first and second parts, and first and second digital signatures of said first and second parts;

partition said service message into a first partition and a second partition, wherein said first partition comprises said first part of said service message and said first digital signature, and wherein said second partition comprises said second part of said service message and said second digital signature;

send said first partition to a first service in said multi-service environment;

verify said first part of said service message at said first service using said first digital signature;

send said second partition to a second service in said multi-service environment;
and

verify said second part of said service message at said second service using said second digital signature.

25. (original) A computer system according to claim 24, wherein at least one message component is common to both said first and second parts of said service message.

26. (original) A computer system according to claim 24, further configured to associate one or more message components relating to a first service with each other to form said first part, and associating said one or more message components relating to a second service with each other to form said second part.

27. (original) A computer system according to claim 24, wherein said first part of said message is associated with a first service, and said second part of said message is associated with a second service.

28. (original) A computer system according to claim 27, wherein at least one message block is common to both said first and second parts of said service message.

29. (currently amended) A computer system according to claim 27, wherein two or more blocks comprising one of said first ~~or~~ and second parts of said message are related to each other.

30. (original) A computer system according to claim 24, further configured to form said service message such that cryptographic data for said service message is disposed in a separate part of said message from said first and second parts.

31. (currently amended) Apparatus for forming and decoding a service message for a multi-service environment, comprising:

- means for receiving one or more components for a service message;
- means for digitally signing one or more of said components for a first part of said service message;
- means for digitally signing one or more of said components for a second part of said service message; and

means for creating said service message from said first and second parts, and first and second digital signatures of said first and second parts;

means for partitioning said service message into a first partition and a second partition, wherein said first partition comprises said first part of said service message and said first digital signature, and wherein said second partition comprises said second part of said service message and said second digital signature;

means for sending said first partition to a first service in said multi-service environment;

means for verifying said first part of said service message at said first service using said first digital signature;

means for sending said second partition to a second service in said multi-service environment; and

means for verifying said second part of said service message at said second service using said second digital signature.

32. (currently amended) A computer system for a multi-service environment, the computer system configured to:

receive a service message comprising first and second parts respectively associated with first and second services of said multi-service environment;

verify only said first part of said service message for said first service; and

verify only said second part of said service message for said second service;

wherein at least one message component is common to both said first and second parts of said service message.

33. (currently amended) Apparatus for decoding a service message comprising first and second parts respectively associated with first and second services of a multi-service environment, said apparatus comprising:

means for receiving said service message;

means for partitioning said service message into a first partition and a second partition, wherein said first partition comprises said first part of said service message, and wherein said second partition comprises said second part of said service message;

means for verifying only said first part of said service message for said first service; and

means for verifying only said second part of said service message for said second service.

34. (currently amended) A computer network comprising at least one computer system connectable to at least one further computer system via a network, the at least one computer system configured to:

receive two or more message components for a service message;

digitally sign one or more of said message components for a first part of said service message;

digitally sign one or more of said message components for a second part of said service message; and

form said service message from said first and second parts, and first and second digital signatures of said first and second parts;

wherein at least one message component is common to both said first and second parts of said service message.

35. (currently amended) A computer network comprising at least one computer system connectable to at least one further computer system via a network, the at least one computer system configured to:

receive a service message comprising first and second parts respectively associated with first and second services of said a multi-service environment;

partition said service message into a first partition and a second partition, wherein said first partition comprises said first part of said service message, and wherein said second partition comprises said second part of said service message;

verify only said first part of said service message for said first service; and

verify only said second part of said service message for said second service.